



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT  
4735 EAST MARGINAL WAY SOUTH, BLDG 1202  
SEATTLE, WA 98134-2388

August 10, 2023

**SUBJECT:** Comments on USEPA's Proposed Plan for the cleanup of the East Waterway Operable Unit.

Mr. Ravi Sanga, USEPA  
Environmental Protection Agency Region 10  
1200 Sixth Avenue Suite 155  
Superfund Records Center, MS: 17-C04-1  
Seattle WA 98101

Dear Mr. Sanga,

The U.S. Army Corps of Engineers (Corps) appreciates the opportunity to comment on the Proposed Plan for the Harbor Island Superfund Site, East Waterway Operable Unit (OU), and provides the following comments.

The comments included in this letter relate to the potential effects of the Proposed Plan on the authorized Federal navigation channel and the 33 U.S.C. § 408 (Section 408) substantive requirements for modifications to Federal projects. The Proposed Plan should address the requirements of Section 408 and should not impinge upon the Federal navigation authority. The East Waterway is a Federally authorized navigation channel. The cleanup action selected must not adversely affect the function of or impair the usefulness of this waterway; for example, by altering the boundaries or depth of the authorized channel, or by increasing maintenance or repair costs to the channel, or by imposing restrictions that would interfere with the authorized channel.

I. Future Land Uses

The Proposed Plan at page 7 references the authorized depth of the East Waterway, northern portion, as -51 feet MLLW. But as the EPA notes later in the Proposed Plan, the Water Resources Development Act (WRDA) of 2018, P.L. 115-270 (Oct. 23, 2018) authorized the deep main body reach of the East Waterway to -57 feet MLLW. As stated in the Chief of Engineers Report dated June 7, 2018, and later adopted by Congress in Section 1401(1) of the WRDA 2018, the deep main body reach is authorized to a project depth of -57 feet MLLW. The

approach reach width is authorized to 700 feet wide (1,200 feet long) and the inner reach width is authorized to 500 feet wide (4,800 feet long).<sup>1</sup>

As EPA also notes, the Seattle Harbor Navigation Improvement Project (SHNIP) will only be implemented following cleanup of the East Waterway OU – it will not impede the East Waterway OU cleanup (Proposed Plan page 15). The Corps appreciates that EPA has evaluated whether each alternative would be compatible with future channel deepening from the SHNIP, and welcomes EPA’s preferred alternative, Alternative 3B(12), which envisions “full removal of contaminated sediment within the navigation channel boundaries.” (Proposed Plan page 43). While EPA anticipates that this alternative is unlikely to conflict with future SHNIP construction activities, the Corps asks that EPA ensure that any cleanup action be designed around the existing Congressionally-authorized dimensions and the future plans for this waterway.

## II. Remedial Technologies

The Corps has an interest in ensuring that capping contaminated materials in the authorized Federal navigation channel is done properly. The top of the environmental cap should be deep enough so future dredging can be done to minimize the risk of breaching remediation protective capping and exposure of contaminants while allowing the dredging to remain cost effective. The SHNIP anticipates that future vessels navigating the East Waterway will be larger in size and have deeper draft requirements. These larger ships have the potential to disturb more sediment at the bottom of the Federal channel. EPA acknowledges that “propwash may affect sediment as deep as 5 feet below the sediment surface.” (Proposed Plan page 11). However, this analysis of propwash appears to be based on vessels of smaller size. Based on the anticipated future navigational needs in the East Waterway, technical review of prior dredging activities in the Seattle District and other Corps Districts, and considering research from the Corps’ ERDC facility, the Corps requests a final cap elevation equal to authorized depth plus 2-foot over-depth, and an additional 4-foot deep buffer zone for cap protection. This is based on the type of equipment that typically maintains this channel (clamshell mechanical dredging) and considers the typical 2-foot over-depth dredging that is usually performed. As an example, the authorized depth of the navigation channel is -57 feet MLLW. With the 2-foot over-depth plus 4-foot buffer zone, a protective cap should be at -63 feet MLLW or deeper. The buffer zone could be clean material or simply a water buffer. For enhanced natural recovery (ENR), final ENR and/or residuals management cover (RMC) elevation should equal authorized depth plus 2-foot over-depth and an additional 2-foot deep buffer zone for ENR and RMC protection.

The preferred alternative also contemplates capping in nearshore areas (Proposed Plan page 32). EPA should ensure any caps in these areas will not affect the Federal navigation channel. From a horizontal positioning perspective, we would therefore like to see a 10-foot horizontal buffer zone between the authorized Federal channel and the edge of a protective cap

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<sup>1</sup> The 1,232 feet at the southern portion of the East Waterway has no change to its authorized depth of -34 feet MLLW and its authorized width of 500 feet.

to minimize horizontal positioning errors that could cause cap breaching. The 10-foot horizontal buffer is roughly the equivalent of the dredge bucket width used during maintenance dredging.

The Corps understands that RMC may be placed on post-dredge surfaces where residuals have settled, to provide a cleaner surface material that would mix with the underlying contaminated sediment to reduce contaminant concentrations at the post-dredge surface (Proposed Plan page 27). While the Corps does not have a general concern with placement of RMC for this purpose, we would be concerned if RMC is placed in the Federal navigation channel above the 2-foot over-depth plus 2-foot deep buffer zone for the purpose of isolating or containing potential CERCLA-regulated material. If that material is later identified as isolating or containing CERCLA-regulated material above Remedial Action Levels, the Corps may be unable to dredge the area.

Further, the Corps is concerned that areas impacted by the remedial action that are left at or above the authorized depth plus the 2-foot over-depth and 4-foot deep buffer zone may be identified in the future as unsuitable per the Dredged Material Management Program (DMMP) guidance. Material determined to be unsuitable per the DMMP will incur increased maintenance dredging and disposal costs that may impact the Corps' ability to perform maintenance dredging and thus may impair the usefulness of the federal project.

The Corps urges EPA to eliminate potential future dredging problems by eliminating or minimizing material above the 2-foot over-depth and 4-foot deep buffer zone at the remedial action areas. Should it later be discovered in the course of preparing for construction or maintenance dredging that materials at or above the 2-foot over-depth and 4-foot deep buffer zone exceed Remedial Action Levels, USACE may be unable to dredge those areas.

### III. Section 408 Substantive Compliance

As the cleanup plan is further refined, the substantive requirements of Section 408 should also be addressed through coordination and review of these requirements. The Corps is willing to work with EPA to ensure that the remedy implemented will not impair the usefulness of the Federal navigation channel at existing authorized depths or be injurious to the public interest. Though not an inclusive list, this review generally includes:

1. An analysis of how the Federal navigation channel currently functions, taking into consideration: (1) volume, frequency, and timing of traffic and (2) future construction and operation and maintenance activities.
2. Factors that may determine whether an action impairs the usefulness of the navigation channel include an analysis of impacts to future Construction and Operation and Maintenance (O&M) dredging. This would require investigating potential changes in flow distribution and sediment transport associated with the proposed action, as well as any anticipated changes in O&M costs. A technical analysis of design should also be considered, which may include an analysis of water surface profile following the designed action for various flood return intervals;

a Geotech evaluation of upstream levees (if hydraulic capacity has been altered); and an analysis of predicted shoaling rates in the Federal navigation channel.

3. Factors that may be relevant to the public interest include, but are not limited to, such things as conservation, economic development, historic properties, cultural resources, environmental impacts, water supply, water quality, flood hazards, residual risk, induced damages, navigation, shore erosion or accretion, and recreation.

4. Real Estate analysis, if relevant, to include a description of all lands, easements, and rights of way owned as part of the authorized project, a description of all lands, easements, and rights of way required for the modification, and maps clearly depicting both existing real property and additional real property required should also be provided.

The Section 408 review will be an ongoing process and require close coordination with the Corps as more detailed plans evolve for the selected cleanup action.

The Corps looks forward to continuing to coordinate closely with EPA on the remedial action at the East Waterway OU. If you have any questions regarding these comments, please contact Mr. John Hicks, Chief of Navigation, at (206) 764-6908 or [john.a.hicks@usace.army.mil](mailto:john.a.hicks@usace.army.mil).

Sincerely,

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Chief, Operations Division

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